REMARKS

This is in response to the Office Action mailed on June 4, 2003 in regard to the above-identified patent application. Claims 1, 4 and 6 have been amended to more clearly describe Applicant's invention. Claims 1-11 are pending in the present case.

The period for response to the Office Action mailed ended on September 4, 2003. Please find filed herewith a petition for a two month extension of time. The period for response with the two month extension ends on November 4, 2003.

If for any reason the petition should become separated from this response, the Commissioner is respectfully requested to consider this a petition for any extension of time required to maintain the pendancy of this patent application. In this event the Commissioner is also authorized to charge Deposit Account No. 50-1894 for any fee that may be required to maintain the pendancy of this patent application.

35 USC §112 REJECTION

The Examiner has rejected Claims 1-11 under 35 USC 112, second paragraph. In light of the amendments made above, Applicant believes this rejection has been overcome. More specifically, Applicant has amended Claims 1 and 6 to better describe the electromagnetic pattern with respect to the monopole antenna. Additionally, Applicant has amended Claim 4 to provide for exemplary generic biocompatible materials, rather than the trademark TEFLON.

35 USC §102 REJECTIONS

The Examiner has rejected Claims 1, 2, 5, 6, 8 and 9 under 35 USC 102(b) as being anticipated by Walinsky et al ('649). Applicant believes the Examiner should withdraw this rejection.

Walinsky et al disclose an ablation catheter comprising a coaxial cable having a center conductor which terminates into an antenna structure. As noted by the Examiner, Walinsky et al also disclose antennae of different shapes. (See FIGS. 5A-C of Walinsky et al). Referring to FIGS. 5A-C Walinsky et al states, "[s]uch antenna shapes are advantageous in

that they tend to ... provide a high current density along the radiating element." See Col. 7 lines 34-38 of Walinsky et al. While it is true that such shapes result in high current densities, these densities are not uniform across the antenna itself. Non-uniformity high current densities result in "hot spots" as described in paragraphs 6-9, with reference to FIGS. 1A-B, of the present application. It is these "hot spots" which the present invention overcomes.

Applicant has amended Claim 1 above to more clearly define the invention. More particularly, Claim 1 requires, in part, "a monopole antenna ... having a predetermined shape ... from which electromagnetic energy is emitted, the predetermined shape having at least one tapered portion ... wherein the predetermined shape of the monopole antenna results in the creation of a relatively uniform electromagnetic field pattern *about the monopole antenna.*" Therefore, it is the predetermined shape of the monopole antenna which minimizes the "hot spots" related to high current densities.

Walinsky et al is devoid of any teaching or suggestion of providing a monopole antenna having a predetermined shape, including a tapered portion, which results in a relatively uniform electromagnetic filed pattern about the monopole antenna. Moreover, regarding the antenna shapes of FIG. 5 of Walinsky et al, Walinsky et al states, "[s]uch shapes are less well adapted to catheter use than the antennas illustrated in FIG. 6." See Col 7, lines 39-41 of Walinsky et al. That is, Walinsky teaches away from using the structures depicted in FIG. 5 in catheter designs.

In light of the foregoing, Applicant respectfully submits that Claim 1 is now in condition for allowance. Applicants have amended Claim 6 in similar fashion as Claim 1 and, for the reasons set forth above, respectfully submit that the above rejection based upon Walinsky et al and with respect to Claim 6 have been overcome.

Since Claims 2, 5, 8 and 9 all depend from, directly or indirectly, and further limit independent claims which Applicant believes are now in allowable form, Applicants respectfully submit that the rejection of Claims 2, 5, 8 and 9 have been overcome, as well.

35 USC §103 REJECTIONS

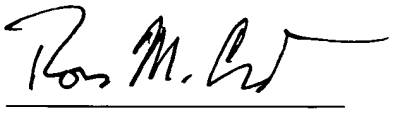
The Examiner has rejected Claims 3 and 4 under 35 USC 103(a) as being unpatentable over Walinsky et al in view of Lenihan et al ('382) and Larson ('018), and Claims 7, 10 and 11 under 35 USC 103(a) as being unpatentable over Walinsky et al in view of Moss et al ('803). Applicant respectfully submits that these rejections be withdrawn.

Since Claims 3, 4, 7, 10 and 11 depend from, either directly or indirectly, and further limit independent claims, claims which Applicant believes are now in allowable form as set forth above, Applicant also respectfully submits that Claims 3, 4, 7, 10 and 11 are in allowable form.

Moreover, since Walinsky et al teaches away from the use of structures similar to those of the present invention (see FIGS. 5A-C of Walinsky et al), Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine Walinsky et al with Lenihan, Larsen, Moss et al or any other reference of record to arrive at the structures claimed in Claims 3, 4, 7, 10 and 11.

In view of the above amendments and the discussion relating thereto, it is respectfully submitted that the instant application, as amended, is in condition for allowance. Early reconsideration and reexamination is respectfully requested. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully Submitted,

By: 

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